

continuation in part of Serial No. 09/160,340 filed September 25, 1998, which claims the benefit of co-pending provisional application Serial No. 60/060,060, filed September 25, 1997. Each of these applications is incorporated by reference herein.

A1
Cone

(2) On page 2, delete the paragraph at lines 26-29 and substitute the following paragraph:

A2

Still another embodiment of the invention provides a temperature sensitive plasmid. The plasmid replicates at 30 °C but not at 40 °C in *P. haemolytica*. Moreover, it is of the same incompatibility group as the plasmid which has been deposited at the ATCC with Accession No. 98895.

A3

(3) On page 4, delete the paragraph at lines 19-23 and substitute the following paragraph:

Also provided by the present invention is a temperature sensitive plasmid which replicates at 30 °C but not at 40 °C in *P. haemolytica*. Preferably the plasmid is of the same incompatibility group as pD80, i.e., it shares the same origin of replication. One such plasmid has been deposited at the ATCC with Accession No. 98895.

IN THE CLAIMS

Please delete claims 1-34 and substitute the following new claims.

A4

35. (new) A method of inducing immunity to pneumonic pasteurellosis in ruminants, comprising the step of:

administering to a ruminant a *P. haemolytica* bacterium which (a) expresses no biologically active leukotoxin, (b) expresses a form of leukotoxin molecule which induces antibodies which neutralize biologically active leukotoxin, and (c) contains no non-*P.*